

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of the Claims:

1. (Currently amended) A millimetre wave imaging apparatus comprising scanning means, focusing means and a plurality of receiver elements, the focusing means being physically interposed between the scanning means and the receiver elements, the scanning means comprising two rotatable prisms ~~being~~ arranged to scan radiation from a field of view onto said focusing means such that focussed radiation from a region of the field of view is incident upon at least one of the plurality of receiver elements.

2. (Cancelled)

3. (Currently amended) Apparatus according to Claim ~~2~~ 1 wherein ~~the~~ each prism is a wedge prism.

4. (Currently amended) Apparatus according to Claim 2 wherein ~~the~~ each prism is of uniform thickness and varying refractive index across a cross-section thereof.

5. (Cancelled)

6. (Currently amended) Apparatus according to Claim ~~5~~ 1 wherein the ~~prism~~ scanning means is arranged to produce a circular scan path in the focal plane.

7-8. (Cancelled)

9. (Currently amended) An apparatus according to Claim ~~8~~ 1 wherein the prisms are arranged to rotate in opposite directions to each other.

10. (Currently amended) An apparatus according to ~~any one of Claims 1 7 to 9~~ wherein the prisms are arranged to produce an elliptical scan path in the focal plane.

11. (Original) An apparatus according to Claim 10 wherein the elliptical scan path has a minor diameter that approximately corresponds to a spacing between adjacent receiver element of an array.

12. (Currently amended) An apparatus according to Claim 10 ~~or Claim 11~~ wherein the plurality of receivers are formed into a two dimensional array, and the elliptical scan path has a major diameter that approximately corresponds to a distance between adjacent receiver elements of an array.

13. (Currently amended) An apparatus according to ~~any one of Claims 1 7 to 12~~ wherein the prisms are arranged to rotate at a rate of at least 25 revolutions per second.

14. (Currently amended) An apparatus according to ~~any preceding~~ claim 1 wherein the plurality of receiver elements are arranged in a linear array, a curvilinear array or a sparse two dimensional array.

15. (Currently amended) An apparatus according to ~~any preceding~~ claim 1 wherein the focusing means is a reflector lens.

16. (Original) An apparatus according to Claim 15 wherein the reflector lens comprises a first polarising element.

17. (Currently amended) An apparatus according to ~~either of Claims 15 or 16~~ wherein the reflector lens comprises a second polarising element arranged to reflect radiation transmitted by the first polarising element.

18. (Currently amended) An apparatus according to ~~any one of Claims 15 to 17~~ wherein the reflector lens comprises a polarisation altering element.

19. (Currently amended) Apparatus according to ~~any preceding~~ claim 1 wherein the scanning means, which is arranged to define an entrance pupil of the apparatus, is placed at the effective centre of curvature of the focusing means.